# CAP SUBORDINATE UNIT INSPECTION GUIDE 1 Aug 2002

	TAB C-4: AIRCRAFT MANAGEMENT	
	ITEM	REFERENCE
1.	Does the unit have an aircraft assigned? If	
	so, please show the following:	
	a. CAP Forms 37A	CAPR 67-4 Para 2-6
	b. Registration	CAPR 67-4 Para 2-7
	c. Monthly Activity Report to Wing	Wing Directives
2.	How do you manage the aircraft and/or glider	
	maintenance?	
	a. Centralized Maintenance Management	CAPR 66-1 Para 4 and
	Program Supplement	Wing Supplement
	b. Aircraft maintenance records	CAPR 66-1 Para 5
	c. Airworthiness Standards	CAPR 66-1 Para 2b
3.	What placards are placed in the aircraft?	CAPR 66-1 Para 6
4.	How is the external appearance of the	
	aircraft?	
	a. Markings	CAPR 66-1 Para 7a
	b. Paint schemes	CAPR 66-1 Para 7b
	c. Wash schedule (local directives)	
	d. Hangar available during inclement weather	CAPR 66-1 Para 15
5.	How do you track aircraft inspections?	FARs and CAPR 66-1
	• 100 Hours/Annual	Para 8b & 8c
6.	How do you track routine maintenance?	FARs
	a. Oil changes	CAPR 66-1 Para 8a
	b. Corrosion control	CAPR 66-1 Para 9b
	c. Tire changes (local directives)	
7.	How do you monitor equipment	
	requirements?	
	a. Aircraft shoulder harness	CAPR 66-1 Para 11a
	b. Modified seat requirements	CAPR 66-1 Para 11c
	c. Fire extinguisher requirements	CAPR 66-1 Para 11b
	d. Comm/Nav equipment updates (GPS, WX	CAPR 66-1 and
	scopes, Standby Vacuum System, etc	local directives
	e. Survival Kits	CAPR 66-1 Para 11h
	f. Proper flotation devices	CAPR 60-1 Para 2-1i
		& CAP/EX ltr Dec 01
8.	How do you tie down your aircraft?	CAPR 66-1 Para 15
	• Tie down inspections (replaced as needed?)	
9.	Is the additional equipment maintained in	
	each aircraft's baggage compartment	
	accounted for on every flight's weight &	
	balance?	

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# CAPF 71, FEB 00 (Page 1 of 2)

(www.capnhq.gov)

Cap Aircraft Inspection Chec	klist	
Wing: Date/Tach Time Last 50-Hour Insp/O	il Cha	ange:
Tail #: Date/Tach Time @	Last 1	100-Hour Insp:
Make/Model/Year: Date/Tach Time @ Tach Time:	Last A	Annual Insp:
racii filile.		
Inspection Item	Y	N Remarks / Discrepancy
(Installed/Serviceable/Current ⇒)		
1. Aircraft Records		
A. Aircraft Logbooks- 50-Hour Insp/Oil Change, 100-Hour Insp, Annual Insp, &		
Airworthy Directives (AD) Compliance Listing Current (Ref: FAR 91.417)	++	
B. Equipment List (CAPF 37) Matches Equipment Installed	++	
C. Instrument Requirements	++	
1) Altimeter System Current – Entry in Logbook (24 Mo. Ref: FAR 91.411)	$\perp \perp$	
2) Pitot / Static System Current – Entry in Logbook (24 Mo. Ref: FAR 91.411)	1	
3) Transponder Current – Entry in Logbook (24 Mo. Ref: FAR 91.413)	++	
4) VOR Operational Check – IFR Only (30 Days Ref: FAR 91.171) 5) ELT Battery Current – Entry in Logbook (Ref: FAR 91.207)		
5) ELT Battery Current – Entry in Logbook (Ref. FAR 91.207)	++	
2. Aircraft Interior		
		· · · · · · · · · · · · · · · · · · ·
A. Obvious Defects, Leaks, Corrosion, Cleanliness, and Condition of Interior	++	
B. "Not for Hire" Placard Displayed (Ref: CAPR 66-1)	++	
C. "Max Crosswind" Placard Displayed (Ref: CAPR 66-1)  D. "Cessna Seat Slippage Warning" Placard Displayed (CAPR 66-1)	++	
	++	
	++	
	$\vdash$	
	++	
	++	
I. Carbon Monoxide Detector – Serviceability, Expiration Date (CAPR 66-1)     J. Cessna Seat Rails for Cracks & Wear (Ref: AD 87-20-03, Rev 2)	+	
K. Secondary Seat Stop Installed (All Cessna Aircraft, Excluding 172R)	++	
L. Cargo Tie-Down Or Net Installed (Ref: FAR 91.525)	+	
M. Required Documents in Aircraft A-R-O-W	++	
1) Airworthiness Certificate (Ref. FAR 91.203)	++	
2) Registration (Ref. FAR 91.203)	++	
3) Operating Handbook (Ref: FAR 91.9)	+	
4) Weight & Balance Data (Ref: Acft Flight Manual / POH)	++	
N. Survival Kit. (Ref CAPR 66-1)	++	
The out which (Ref of the court)	++	
3. Aircraft Exterior		
A. Aircraft Properly Chocked, Tied Down, and Condition of Ropes		
B. Obvious Defects, Leaks, Corrosion, Cleanliness, and Condition of Paint	1	
C. Condition of Prop – Nicks, Dents, Leaks, Corrosion, Evidence of Prop Strike	++	
D. External Aircraft Identification Plate (Ref. FAR 45.11)	+	
E. CAP Seal Installed on Vertical Stabilizer	++	
F. Brakes for Leaks, Wear, and Obvious Defects (Ref: Acft Service Manual)	++	
G. Tires for Proper Air Pressure and Serviceability (Ref: Acft Service Manual)	++	
H. Engine Cowling for Proper Fit And Contour / Fasteners Serviceable and Secure	+	
Cessna Door Hinge Pins Installed	++	
4. Exterior And Interior Lighting For Proper Operation		
A. Interior Overhead (Flood/Dome)		
B. Landing / Taxi / Pulselite	+	
C. Anti-Collision Strobe (Ref. FAR 91.209)	++	
D. Navigation / Position (Ref: FAR 91.209)	11	
E. Flashing Beacon	+	
F. Instrument		
Name Of Inspector:	i i	Date:
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**CAPF 71, FEB 00** 

**Previous Editions Will Not Be Used** 

**OPR/ROUTING: LGM** 

## CAPF 71, FEB 00 (Page 2 of 2)

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#### Instructions for use of the CAP Aircraft Inspection Checklist

The CAPF 71 is designed to assist the inspector in determining the overall condition of the aircraft, as well as ensuring compliance of FAA and CAP regulations and directives.

#### Aircraft Records.

Item a. Airworthiness Directive Listing in Logbook: FAR 91.417 requires the aircraft records (logbooks) to contain the current status of applicable airworthiness directives, the method of compliance, the AD number, revision date, and recurring action if required. The A&P / Al should have performed and documented all applicable ADs as part of the 100-hour or annual inspection and updated the compliance listing in the maintenance

Item b. Equip List (CAPF 37) Matches Installed Equipment: HQ CAP requires all wings to account for equipment installed in aircraft, such as radios, on a CAPF 37. Confirm the CAPF 37 is complete and matches the type equipment installed in the aircraft. Verification of serial numbers is not

Items c1), c2), and c3). Instrument Requirements: FAR par 91.411 and 91.413 requires the altimeter, pitot static and transponder to be tested and inspected every 24 months. The inspection dates are annotated in the airframe logbook, which usually are not kept in the aircraft. The maintenance officer or unit commander controlling this aircraft can provide you the records. Item c4). VOR Check: The VOR check is required by FAR 91.207 to be accomplished prior to the flight or within the preceding 30 days if the aircraft is to be operated under IFR. The pilot can accomplish this test by checking the VOR against a designated VOR checkpoint on the ground or by flying over a prominent ground point, or if the aircraft has dual VORs by checking them against each other. When performing the check, the pilot should record the date, place, bearing errors and sign the log or record. The aircraft cannot be flown IFR if this check has not been performed or

Item c5). ELT Battery: FAR 91-207 requires the expiration date of the ELT battery be legibly marked on the outside of the transmitter and entered in the aircraft logbook. FAR 91-207 requires ELTs to be inspected during the aircraft annual inspection and this inspection annotated in the aircraft logbook.

### Aircraft Interior.

Item a. Check for obvious defects, leaks, corrosion, cleanliness, and condition of interior

Items b, c, d, and e. Placards: Not for Hire/Maximum Crosswind/ Cessna Seat Slippage Warning/Operating Limits. Ensure these placards are properly installed and visible. These placards can be ordered through the CAP Supply Depot in Amarillo TX.

Item f. Avionics and Control Locks Installed: Assure the avionics and control locks are installed. Aircraft radio & nav equipment are very expensive and can be easily stolen. The hole drilled in the control column for installation of the control lock should be centered to assure the flight controls are locked in the neutral position. On many Piper aircraft, the seat belt is used to hold the flight controls in a static position versus the use of a

Item g. Fire Extinguisher: Check that one is installed and serviceable (in the correct range).

Item h. Shoulder Harness: CAPR 66-1 states that all CAP corporate aircraft will have shoulder harnesses for the pilot and co-pilot positions. Newly assigned aircraft have 90 days to have them installed; after 90 days. the aircraft is grounded until they are installed. FAR 91.205 also requires shoulder harnesses on aircraft manufactured after July 18, 1978.

Item i. Carbon Monoxide Detectors: For safety, disposable 12- to 18month carbon monoxide detectors will be installed in all CAP-owned aircraft. Inspect detectors for serviceability (change of indicator color) and valid expiration date. These detectors will be replaced every 12 months **Item j. Cessna Seat Rail Condition:** The Cessna seat rails must be

checked for overall condition. Check specifically for any cracks in the rails or runners. If any cracks or questionable defects are found, have an A&P mechanic inspect it for serviceability. Also, check for elongation of the holes on the rails, seat locking pin rounding and roller washer wear.

Item k. Secondary Seat Stop Installed (All Cessna Aircraft, Excluding 172R and Older Models): The secondary seat stop requirement is required for all Cessna aircraft, excluding the 172R and later models. Cessna redesigned the seat rails on this model, eliminating the requirement. The secondary seat stop is installed on the right side of the pilot's seat (left front seat) to prevent it from sliding if the seat pin fails. This is a HQ CAP mandatory equipment requirement.

Item I. Cargo Tie-down or Cargo Net: FAR 91.525 requires cargo to be properly secured by a safety belt or other tie-down method having enough strength to eliminate the possibility of shifting during operation. Cargo net is recommended for the cargo compartment.

**CAPF 71. FEB 00** Reverse Items m1) and m2). Airworthiness Certificate and Registration: These items are normally kept together and mounted in a pouch attached to a sidewall of the aircraft. The Airworthiness Certificate is issued when the aircraft is manufactured, the registration is issued with a change in ownership (i.e., when HQ CAP purchased it). The Radio License is no longer required for operations inside the US.

Items m3) and m4). Operating Handbook & Weight & Balance: FAR 91-9 requires each aircraft to have an operating handbook and displayed operating limits in the form of placards or instrument markings. Ensure the ones required for the specific aircraft you are inspecting are up-to-date (for example, has all the latest equipment added to the aircraft been reflected in the weight & balance data?). Ensure a flight manual, matching the make/model/year of the aircraft, is kept in the aircraft. Check the book for condition, i.e., loose, torn, or missing pages. Ensure the weight and balance data sheets are posted in the book.

Item n. Survival Kit. Assure a survival kit has been established and is available during every flight.

#### 3. Aircraft Exterior.

Item a. Properly Chocked, Tie-Down Method/Condition of Ropes: All aircraft, when not being operated, are required to be properly chocked and secured. The aircraft should also be tied down at 3 points. Chains may be used providing the chain is not directly attached to the ground anchor point. This configuration will damage the wing spars because there is no flexibility during wind gusts. Nylon rope with at least a 3,000 lbs, tensile strength is recommended.

Item b. Exterior Corrosion: HQ CAP emphasizes an aggressive aircraft corrosion prevention program and provides ACF-50 corrosion prohibitor, free to CAP units, to be sprayed on the aircraft. Note any corrosion you find. It is expensive to repair; however, it is less expensive to repair if caught early. This is the most important item to check during your inspection. The primary purpose of paint is to prevent corrosion with a secondary purpose of enhancing appearance. Therefore, look closely for corrosion, and missing or chipped paint. Units need to do touch-up painting on their aircraft and not just let them deteriorate. Corrosion can best be checked by removing an access panel on the leading edge area of the wing and visually looking for corrosion or by looking at exposed metal inside the aircraft such as under carpets. Check for cracks in the aircraft skin. If a crack is detected and has a hole drilled at the progressive end of the crack, this is OK. It is a previous repair called "stop drill" and is designed to stop the crack from progressing any further. If, however, the crack has not been stop drilled or the crack has progressed, it should be repaired.

Item c. Condition of Propeller. Inspect propeller, paying particular attention to nicks and evidence of stress (blade trailing edge wavy) on the propeller. Also check for excessive rubbing marks between spinner and cowling.

Item d. External Identification Plate: FAR 45-11 requires a fireproof plate that is etched, stamped, or engraved with the builder's name, model designation, and serial number. It must be secured to the exterior of the aircraft near the tail surfaces or adjacent or just aft of the rear-most entrance door. If the aircraft was manufactured before March 7, 1988, the plate can be attached to an accessible interior or exterior location near an entrance; however, the model designation and serial number must also be displayed on the aircraft fuselage exterior.

Item e. CAP Seal. A CAP seal must be installed on the vertical stabilizer of all CAP aircraft.

Item f. Brakes. Check brakes and brake lines for leaks, wear, and obvious

Item g. Tires. Check tires for proper air pressure and serviceability.

Item h. Engine Cowling Fit & Fastener Condition: Check the cowling for

proper fit and contour. Check the condition of the fasteners holding it in place. Loose, improper, or defective fasteners or nutplates could cause the cowling to separate during flight.

Item i. Door Hinge Pins (Cessna): Check the door hinges for proper hinge pins. Only authorized Cessna hinge pins will be installed in CAP aircraft. Cotter pins, quick release pins, nails, etc., will not be used and are easily identifiable. For reference only, the correct part numbers are: Cessna 172 upper hinge pin - P/N 0711001-59; Cessna 172 lower hinge pin - P/N 0517019-12; Cessna 182 upper and lower hinge pin - P/N 0711038-1
4. Exterior and Interior Lighting for Proper Operation

Items a, b, c, d, e, and f. Exterior Lighting for Operation: Check all lights for operation. You may do this by turning on the master switch and all

Most of the items on the checklist are self explanatory. The dates and times for the aircraft is annual, 100-hour inspections, and oil changes should be in the aircraft logbooks. Tach times should be used to determine when maintenance actions are required. POC for this checklist is HQ CAP-USAF/LGM, Maxwell AFB AL (334) 953-6032 or DSN 493-6032.

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## **CAPF 37A, AUG 00**

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			Shipping and R	Shipping and Receiving Document for Aircraft	ent for Aircra	#		
Doc Number Issuing/Disposal Activity	/Disposal Activ	vity	Type of Action:			Doc Number Receiving Activity	eiving Activity	
Charter Number Shipped From:	Shipped Fr	om:	Receipt	Custody Receipt_	-	Charter Numb	Charter Number Shipped To:	
			Transfer	Report of Survey	,			
			Disposal	Update				
Asset Number	Tail Number	Serial Number	Year Manufactured	- 1	Make	Model	Fund Source	Cost
Remarks:								
			Certificate for R	Certificate for Receipt by Wing		100 miles (100 miles (		
I certify that the property listed	property list		AP property, that	hereon is CAP property, that it will be safeguarded and maintained, and be used for	arded and m	aintained, and	be used for	
CAP activities o	nly. The uno	dersigned office	er does hereby a	CAP activities only. The undersigned officer does hereby accept accountability for the above property.	ility for the a	bove property.		
Typed Name, Grade of	ade of							
Commander				Signature			Date	
<b>Equipment List</b>								
	Make	Model	Serial Number			Remarks		
Audio Panel								
Nav/Com								
Nav/Com								
DME								
ADF								
Transponder								
GPS		,						
FM Radio								
DF								
Intercom								
Autopilot								
CAP Review For Completeness	npleteness		LO Signature			CAP USAF LR/LG Signature	Signature	
Signature		Date	Date			HQ CAP-USAF Signature	gnature	
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